DOCUMENT RESUME

ED 084 439 CE 000 659

AUTHOR	Callen, John; And Others
TITLE	Treasure Valley Health Manpower and Education Profile.
INSTITUTION	Mountain States Regional Medical Program.
SPONS AGENCY	Health Services and Mental Health Administration (DHEW), Bethesda, Md. Regional Medical Programs Service.
PUB DATE	72
NOTE	57p.; For related documents, see CE 000 658, 660 through 64
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	Census Figures; Health Facilities; *Health Occupations Education; *Health Personnel; Occupational Information; *Occupational Surveys; Population Distribution
IDENTIFIERS	*Mountain States Health Manpower and Education

ABSTRACT

The profile is a concise description of the demographic and economic characteristics, existing health manpower employed, and health education programs for the Treasure Valley area of Idaho, one of seven surveyed in the Mountain States region (Idaho, Montana, Wyoming, and Nevada). The first section of the profile provides general population information, income distributions, and occupational groups of employed persons in the area surveyed. The second section lists the number of people employed in 103 categories of health occupations. The third section lists health education institutions which offer degree or certificate programs in the health field. It includes information about libraries in health related fields and the availability of video-tape equipment. The fourth section is an enumeration of health facilities in the area surveyed. Comparisons are made within the four States and to the United States in toto. Other regions covered are: Carson-Washoe County (CE 000 658), Albany-Laramie Counties (CE 000 660), Yellowstone County (CE 000 661), Missoula County (CE 000 662), Clark County (CE 000 663), and Sheridan County (CE 000 664). (AG)

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TREASURE VALLEY
HEALTH MANPOWER AND EDUCATION
PROFILE

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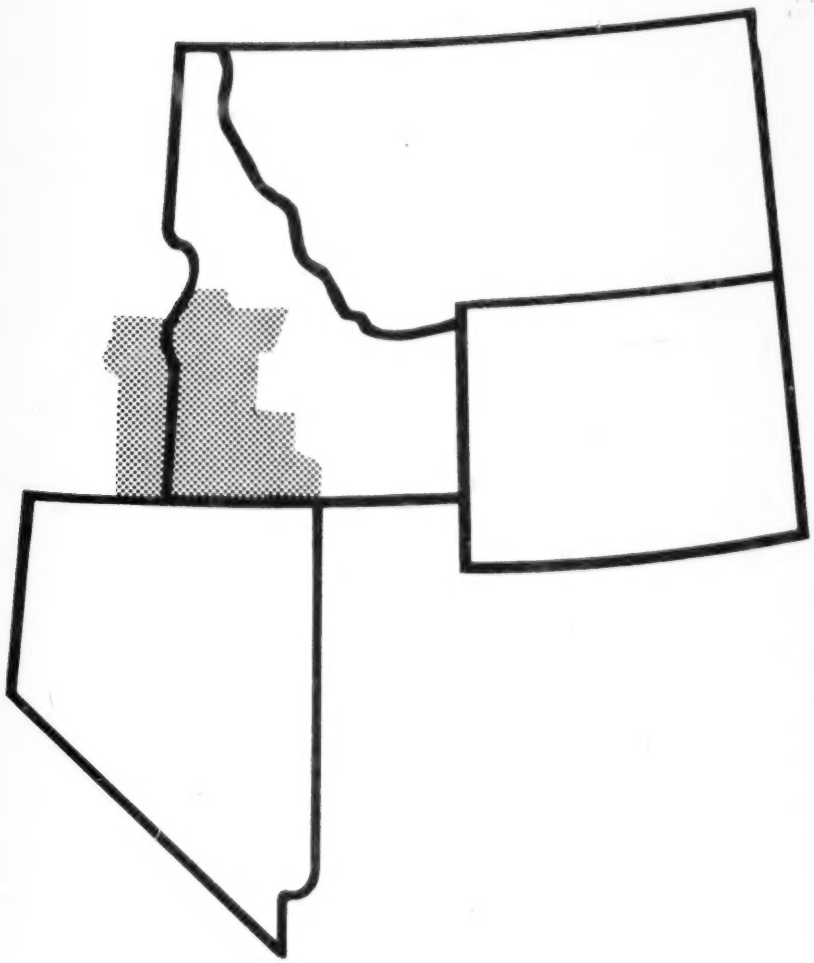
EDUCATION



CE000 651

A Publication of the
MOUNTAIN STATES REGIONAL MEDICAL PROGRAM

1972 EDITION

This publication was prepared by the Mountain States Regional Medical Program, one of 56 programs in the nation supported by the Regional Medical Program Service, a division of Health Services and Mental Health Administration of the U. S. Department of Health, Education and Welfare. The Mountain States Regional Medical Program encompasses Idaho, Montana, Nevada and Wyoming. The Western Interstate Commission for Higher Education (WICHE) serves as the grantee agency for the Mountain States Regional Medical Program.

ED 084439

A PUBLICATION OF THE MOUNTAIN STATES REGIONAL MEDICAL PROGRAM

TREASURE VALLEY

HEALTH MANPOWER AND EDUCATION PROFILE

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C. E. Smith
Myles Gibson

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PREFACE

The sparse population and the scattered population centers of the western states provide a unique set of problems in meeting the health needs of the people within this area. Further, three of the four states served by the Mountain States Regional Medical Program, Idaho, Montana, and Wyoming, do not have medical schools. The fourth state, Nevada, served by the Region has a two-year medical school.

During the summer of 1972, Mountain States RMP directed a concentrated effort toward describing in detail the numbers of health workers in seven co-munity areas in the Region. Additionally, the numbers and kinds of health education occurring in the community were described, and a summary of economic and demographic characteristics of the areas was compiled. This firsthand, current assessment is necessary to plan effectively for programs which aim to increase needed health manpower supply and skill relevance at the community level. Numerous organizations, including the Mountain States Regional Medical Program in its "Health Training Network" activities, are currently approaching this complex problem. Essentially then, the profile is a concise description of the demographic and economic characteristics, existing health manpower employed, and health education programs for each of the seven community areas surveyed in the Mountain States region.

However, the information contained in this profile provides only the "what is" with regard to health manpower and education in the community area. To be used as an effective planning tool, the profile should be accompanied with statements of what "ought to be" with regard to the

distribution, supply, and skill relevance of the health manpower pool necessary to best serve the community area. Comparisons of the "real" and the "desirable" can provide a basis for planning increasingly relevant health education programs. This profile is intended, therefore, to be used by local groups concerned with health planning, by the Mountain States RMP, by educational institutions and state boards of education, by consumers, by health professionals and by other health organizations.

The compilation of the data presented has depended upon the assistance and energies of many persons too numerous to list; however, primary credit goes to Robert Sabin, Coordinator-Planner, Boise Veterans Administration AHEC. Mr. Sabin participated from the inception of the project, provided careful review of several drafts, and collected missing information. Additionally, data collection was part of a more comprehensive effort jointly designed and carried out with two other health organizations in Treasure Valley, the Treasure Valley Comprehensive Health Planning Agency, directed by Gerald Ruzicki, and the Health Systems, Incorporated, under the direction of Douglas Mitchell. Additional acknowledgement is due to Mrs. June Geiger, Mrs. Martha Nichols and Mrs. Myrna Ferguson for their assistance in the typing of this profile, and to the many persons who provided basic information for the profile; they are listed in Appendix 2.

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Director, Health Training Networks

August 1972

INTRODUCTION

The data contained here are divided into four basic parts. First is the demographic data for the area with general population information, income distributions, and occupational groups of employed persons in the area surveyed. This information was obtained from the U.S. Bureau of the Census publications for the 1960 and the 1970 census.

In the second part, the number of persons working in health professions was tallied by the setting in which they are employed. Insomuch as there are some 103 categories of occupations of health workers listed, a set of brief occupational descriptions is given in the appendices to indicate what kinds of employment were included in a given category. Further, a listing of the specific institutions in which health personnel were surveyed is included; in this way, any discrepancies may be readily detected. The exception is private offices, the list of which is too lengthy to include. Importantly, only those health personnel who were employed were enumerated; thus, if a person is a medical technologist, for example, that person was counted only if he or she was currently practicing in the area. In this way a clear picture of the health manpower actually serving the area may be realized. In all cases, part-time employees counted as one-half; therefore, some numbers may have a "0.5" attached which accounts for part-time employees.

Every attempt has been made to insure the accuracy of the data presented; it is conceivable, however, that some persons may not have been counted or that the information that we obtained was in error by passage of time or inaccurate records. Further, we attempted to gather as much information as possible by direct contact with the various work settings rather than through secondary sources. Thus, all data not directly annotated may be assumed to be primary data obtained by interview, telephone contact, questionnaire, etc. In a very few cases, an accurate count simply was not available within budget and time constraints. In these cases the quantity is clearly marked by an asterisk and noted to be an estimate, or was omitted.

The third section is a quantification and listing of the various health education resources and institutions within the area. This section lists the institutions which offer course work leading to a certificate or degree preparing graduates to practice in the health field. This section also contains information about libraries in health related fields and video-tape equipment available to health education and practicing personnel.

The fourth and final section is an enumeration of health facilities such as a number of hospitals, ambulances, pharmacies, and other facilities in the area surveyed.

The general order of presentation of any given set of data is one in which a brief introduction to the section is given describing the specific limitations and features of the data in that section; and a

brief narrative description of the data is given in order to highlight the unusual quantities obtained in the survey. Secondly, a graphic comparison is made with the local quantities of the four state area of Idaho, Montana, Nevada, and Wyoming (Mountain States Region) and to the United States in toto, where such a visual demonstration of the information is deemed useful. Finally, the raw data for the given category is provided for those readers who wish a more detailed description.

Detailed information about procedures and raw data are available upon item-specific request made to:

Mountain States Regional Medical Program
Idaho Division
310 Idaho
Boise, Idaho 83701

SECTION I: POPULATION CHARACTERISTICS

A. INTRODUCTION

This section provides a statistical description of the general demographic characteristics including totals, densities, rural-urban distributions, and age distributions; the economic characteristics of the area in terms of the per capita and family median incomes; and the occupational characteristics of the area in terms of the numbers of persons employed in various selected occupational groups.

Included here are comparison graphs indicating how the Treasure Valley area compares with the Mountain States Region and the United States for given selected statistics from this section.

B. NARRATIVE SUMMARY

1. POPULATION DENSITY:

   The population density of Treasure Valley is indicated by the data to be four times that of the Mountain States Region (Idaho, Montana, Nevada, and Wyoming). However, at some fifty-seven persons per square mile, the population density of the Nation is more than twice that of this area. (see Figure 1)

2. GROWTH RATE:

   The Treasure Valley area has shown a substantially lower growth rate over the last ten years at 8.2% than either the Regional or the National rates of 13.9% and 13.3% respectively. (see Figure 2)

3. AGE DISTRIBUTION:

In relation to the Regional and National distributions, Treasure Valley shows no significantly higher or lower concentrations of any age group.

4. FAMILY MEDIAN INCOME:

The National family median income is approximately three-sevenths greater than for Treasure Valley. The graphic difference indicated here does not appear as dramatic as the situation itself might be; i.e., the number of dollars difference is meaningful only when the relative difference of 43%, in this case, is noted. (see Figure 3)

5. OCCUPATIONAL CHARACTERISTICS:

The most significant fact indicated by the following health worker concentration graph is that the rate of increase in relation to the population is substantially less for Treasure Valley than for the Nation. (see Figure 4)

C. DEMOGRAPHIC CHARACTERISTICS: STATISTICAL SUMMARY

Area Surveyed Treasure Valley

Population: *1960* 259,134[1] *1970* 280,392[2] *Per Cent Change* 8.2%

Geographic Area: 48,367 *Square Miles*[2]

Population Density: 21.896 *Pers/Sq. Mi.*[2]

**Rural Population:* *1960* 124,667[1] *1970* 112,387[2]

Urban Population: *1960* 134,487[1] *1970* 168,005[2]

Age Distribution (1970):[3]

0-4	23,672	*45-49*	15,668
5-9	28,040	*50-54*	15,570
10-14	30,296	*55-59*	14,172
15-19	27,502	*60-64*	12,282
20-24	21,279	*65-69*	9,430
25-29	17,650	*70-74*	7,484
30-34	15,494	*75-79*	5,797
35-39	14,688	*80-84*	3,742
40-44	14,967	*85±*	2,585

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* Rural Population: 2500 or less

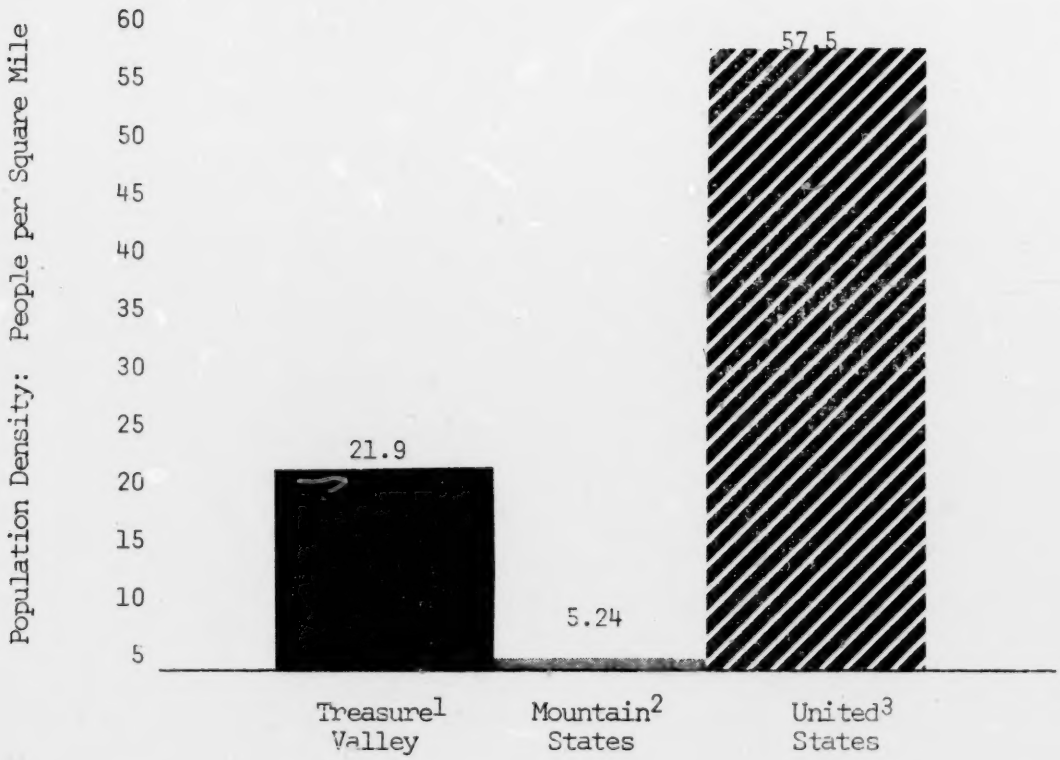
Urban Population: 2501 and over

1. U.S. Bureau of Census, U.S. Census of Population: 1960. Number of Inhabitants, Final Report PC(1)-14A Idaho. U.S. Government Printing Office, Washington, D.C., 1961. Table 6.

2. U.S. Bureau of Census, U.S. Census of Population: 1970. Number of Inhabitants, Final Report PC(1)-14A Idaho. U.S. Government Printing Office, Washington, D.C., 1971. Table 9.

3. U.S. Bureau of Census, U.S. Census of Population: 1970. General Population Characteristics, Final Report PC(1)-14B Idaho. U.S. Government Printing Office, Washington, D.C., 1971. Table 35.

FIGURE 1: Population Density



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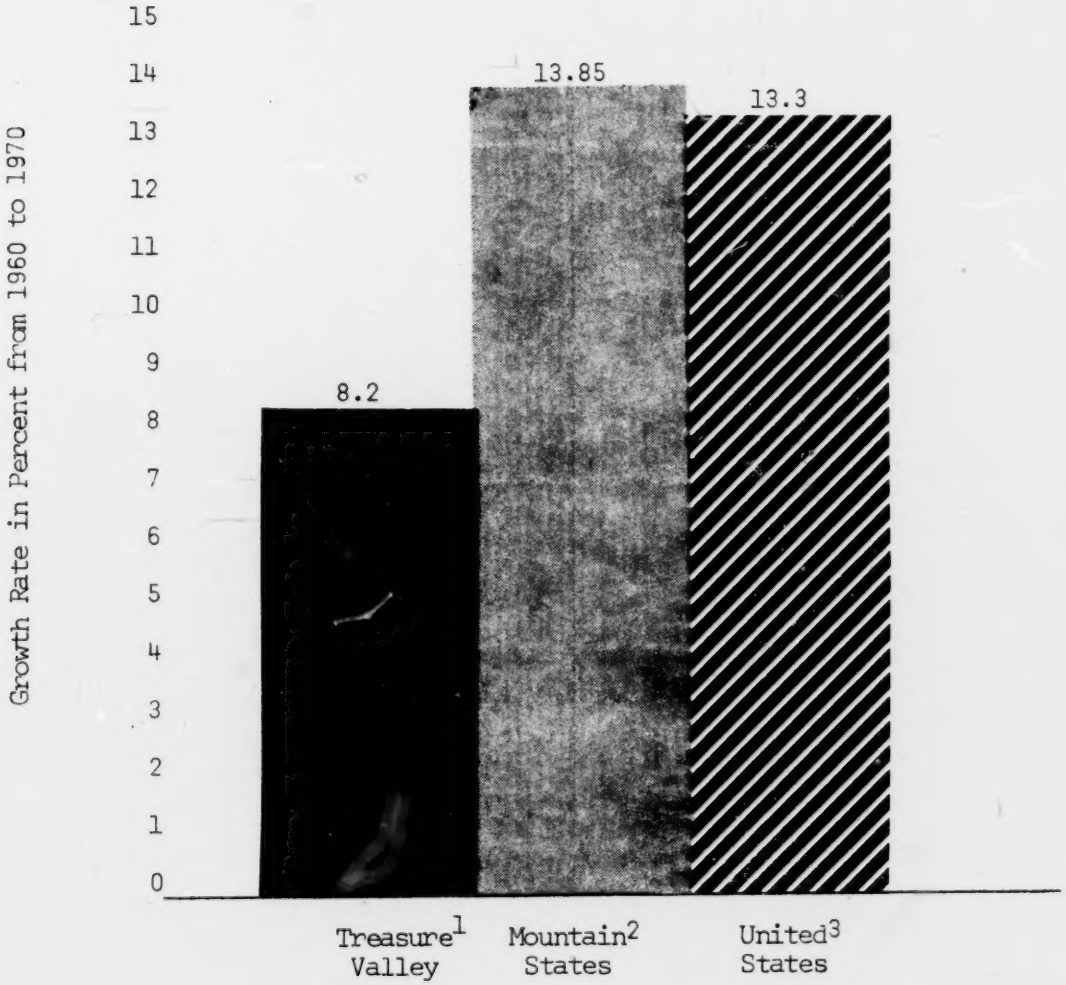
[1] U.S. Bureau of the Census. U.S. Census of Population: 1970. Number of Inhabitants. Final Report PC(1)-14A Idaho. U.S. Government Printing Office, Washington, D.C., 1971. Table 6.

[2] U.S. Bureau of the Census. U.S. Census of Population: 1970. Number of Inhabitants, (Combined data of Idaho, Montana, Nevada and Wyoming). U.S. Government Printing Office, Washington, D.C., 1971.

[3] U.S. Bureau of the Census. Statistical Abstract of the United States: 1971. U.S. Government Printing Office, Washington, D.C., 1971. p. 13.

FIGURE 2: Growth Rate



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[1] U.S. Bureau of the Census. U.S. Census of Population: 1970. Number of Inhabitants. Final Report PC(1)-14A Idaho. U.S. Government Printing Office, Washington, D.C., 1971. Table 9.

[2] U.S. Bureau of the Census. U.S. Census of Population: 1970. Number of Inhabitants, (Combined data of Idaho, Montana, Nevada and Wyoming). U.S. Government Printing Office, Washington, D.C., 1971.

[3] U.S. Bureau of the Census. Statistical Abstract of the United States: 1960 and 1971 (Combined Data). U.S. Government Printing Office, Washington, D.C.

D. ECONOMIC CHARACTERISTICS: STATISTICAL SUMMARY

Area Surveyed Treasure Valley

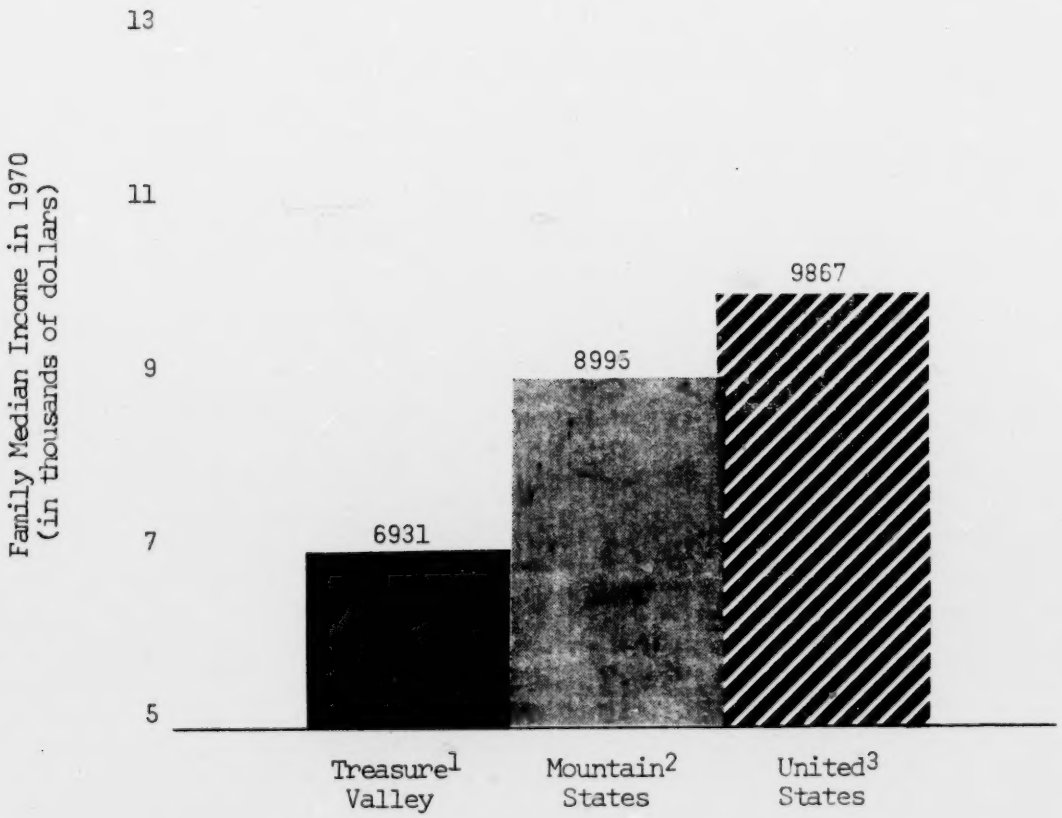
County	*Per Capita Income*		*Family Median Income*	
	1960[1]	*1970*[2]	*1960*[1]	*1970*[2]
Ada - Idaho	$1,893	$3,144	$5,868	$8,111
Adams	1,523	2,732	4,976	7,199
Boise	1,486	2,370	4,774	7,209
Canyon	1,469	2,482	4,596	6,107
Elmore	1,508	2,307	4,769	5,384
Gem	1,375	2,286	4,467	6,246
Owyhee	1,357	1,771	4,199	4,514
Payette	1,388	2,343	4,310	5,751
Valley	1,780	2,896	5,422	7,819
Washington	1,356	2,181	4,231	5,210
Baker - Oregon	1,712	2,585	5,266	7,557
Malheur	1,459	2,377	5,734	5,960
Harney	1,718	2,856	5,513	7,429
Mountain States Region[3]	2,084	3,375	5,628	8,943
United States	2,217	3,910	5,651	9,867

1. U.S. Bureau of Census, Per Capita and Median Family Money Income in 1959 For States, SMA's and Counties. PC(S1)-48. U.S. Government Printing Office, Washington, D.C., 1960. p.40.

2. U.S. Bureau of Census. U.S. Census of Population: 1970. General Social and Economic Characteristics. Final Report PC (1)-14C Idaho. U.S. Government Printing Office, Washington, D.C., 1971. Table 124.

3. All United States and Mountain States data were obtained from the 1966 and 1971 Statistical Abstracts for the U.S. U.S. Government Printing Office, Washington, D.C.

FIGURE 3: Family Median Income



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[1] U.S. Bureau of the Census. U.S. Census of Population: 1970. General Social and Economic Characteristics, Final Report PC(1)-14C, Idaho. U.S. Government Printing Office, Washington, D.C., 1971. Table 124.

[2] U.S. Bureau of the Census. U.S. Census of Population: 1970. General Social and Economic Characteristics, (Combined data of Idaho, Montana, Nevada, and Wyoming). U.S. Government Printing Office, Washington, D.C., 1971.

[3] U.S. Bureau of the Census. Current Population Reports, Consumer Income. Series P-60, No. 78. U.S. Government Printing Office, Washington, D.C., 1971. p. 4.

E. OCCUPATIONAL CHARACTERISTICS: STATISTICAL SUMMARY

Selected Occupational Group of Employed Persons

Area Surveyed Treasure Valley

	1960[2]	*1970*[3]
1. *TOTAL professional, Technical and Kindred Workers*	9,322	14,039
a. *Medical, Dental and Other Health Workers*	1,655	2,217
b. *Salaried Medical and Health Workers (1960 only)*	1,236	
c. *Self-employed Medical and Health Workers (1960 only)*	419	
2. *Farmers and Farm Managers*	10,309	6,473
3. *Manager, Officials, Proprietors*	9,315	10,903
4. *Clerical, Kindred Sales*	17,638	24,482
5. *Craftsmen; Foremen and Kindred Workers*	11,394	13,470
6. *Operative and Kindred Workers including Transport*	11,837	12,935
7. *Service Workers*	7,823	11,944
8. *Farm Laborers and Foremen*	6,774	5,248
9. *Laborers except Farm*	4,444	5,006

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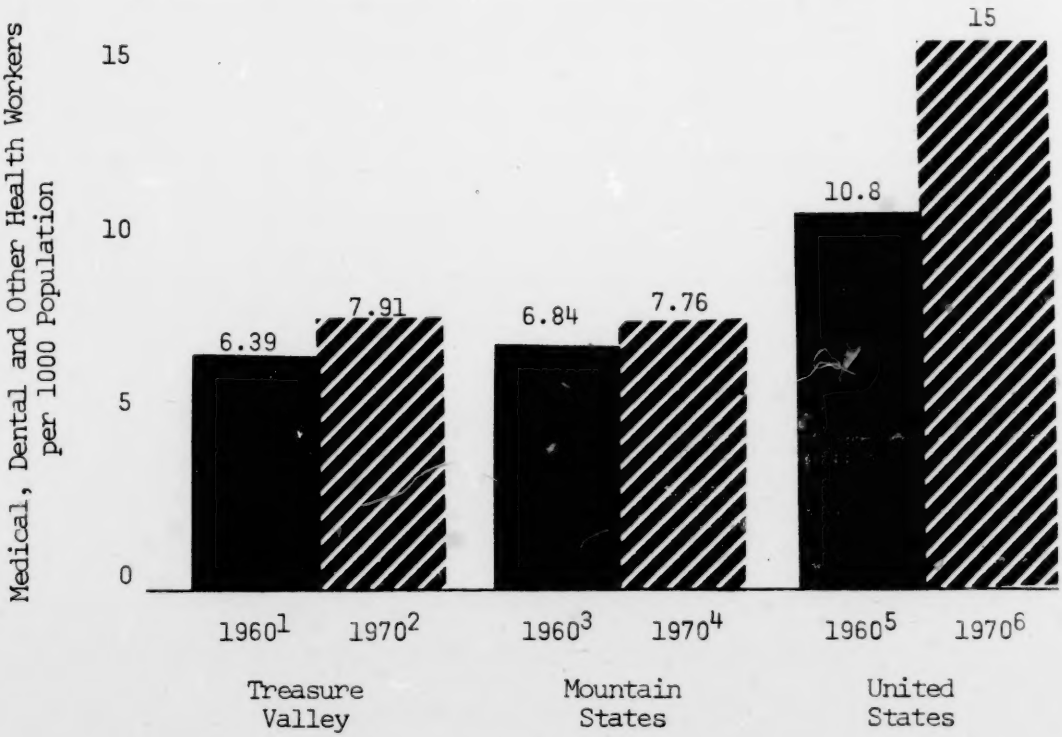
1. This is not intended as a complete enumeration of the labor force in Treasure Valley.

2. U.S. Bureau of Census. U.S. Census of Population: 1960. General Social and Economic Characteristics, Final Report PC(1)-14C Idaho.

3. U.S. Bureau of Census. U.S. Census of Population: 1970. General Social and Economic Characteristics, Final Report PC(1)-14C Idaho.

FIGURE 4: Medical, Dental and other Health Workers



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[1] U.S. Bureau of the Census. U.S. Census of Population: 1960. General Social and Economic Characteristics, Final Report PC(1)-14C Idaho. U.S. Government Printing Office, Washington, D.C., 1961. Table 84.

[2] U.S. Bureau of the Census. U.S. Census of Population: 1970. General Social and Economic Characteristics, Final Report PC(1)-14C Idaho. U.S. Government Printing Office, Washington, D.C., 1971. Table 122.

[3] U.S. Bureau of the Census. U.S. Census of Population: 1960. General Social and Economic Characteristics (Combined data of Idaho, Montana, Nevada and Wyoming), U.S. Government Printing Office, Washington, D.C., 1961.

[4] U.S. Bureau of the Census. U.S. Census of Population: 1970. General Social and Economic Characteristics (Combined data of Idaho, Montana, Nevada and Wyoming), U.S. Government Printing Office, Washington, D.C., 1971.

[5] U.S. Bureau of the Census. Statistical Abstract of the United States: 1962. U.S. Government Printing Office, Washington, D.C., 1962. p. 823.

[6] U.S. Bureau of the Census. Statistical Abstract of the United States: 1971. U.S. Government Printing Office, Washington, D.C., 1971. Table 90.

SECTION II: HEALTH MANPOWER

A. INTRODUCTION

This section deals with the number of persons employed in Treasure Valley in the health professions. In our search of the literature, we found no current enumeration of health professionals in Treasure Valley; consequently, the following data was obtained from primary sources by means of interview, questionnaire, etc., except where noted otherwise.

It is our intent here to provide the reader with a current and accurate statistical picture of the health manpower situation in Treasure Valley. Thus, the raw data is ordered in a rather cumbersome, but necessary, nineteen by one-hundred-and-three matrix. The horizontal axis provides the work setting in which the health professionals in Treasure Valley are employed; the vertical axis indicates the various health occupations which were surveyed. (For the working definitions of these health occupations, see Appendix I.)

The reader will note that many of the occupational categories in various work settings are blank. Rather than omit these, the research team felt that noting the absence of certain categories of health professionals was perhaps an important set of information for the reader.

B. NARRATIVE SUMMARY

In terms of health professionals employed per thousand population, Treasure Valley exhibits a greater concentration of registered nurses and licensed practical nurses and dentists than do either the Region or the Nation. The ratio of physicians to population, however, is noticeably less for Treasure Valley. The other numerical deviations

seem not that large as to call attention. (see Figure 5)

It is important here to note that ratios of health professionals to population provide a gross indication of health manpower; as such, these ratios do not account for distribution and accessibility of these health professionals. In Treasure Valley, specifically, the major concentrations of manpower is in the Boise area.

C. HEALTH MANPOWER: STATISTICAL SUMMARY

Employment Settings *

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
1. *Administration*																				
a. *Hospital Administration*					18.5	2	1		1							2.5				25
b. *Nursing Home Administration*												21.5								21.5
2. *Dentistry*																				
a. *Dentists*																				
1) *Endodontists*																				
2) *Oral Pathologists*																				
3) *Oral Surgeons*	2																			2
4) *Orthodontists*	7																			7
5) *Pedodontists*	2																			2
6) *Periodontists*																				
7) *Prosthodontists*	1																			1
8) *Public Health Dentists*					1.5							1								2.5
9) *General Dentistry*	121					2	7													130
b. *Dental Hygienists*	34										1					1				36
c. *Dental Laboratory Technicians*	26																		.	26

Legend

1 -Private Office
2a-Diagnostic Clinic
2b-Treatment Clinic
2c-Diagnostic/Treatment Clinic
3a-Community Hospital
3b-V.A. Hospital
3c-Military Installation
4a-Community Health Service
4b-County Health Service
4c-State Health Service
4d-Federal Health Service
5 -Nursing Home
6a-Mental Hospital
6b-Mental Health Center
7 -Business and Industry
8a-Educational Institution: Practicing
8b-Educational Institution: Teaching
8c-Educational Institution: Teaching and Practicing
9 -Health Planning and Development Organizations

Employment Settings*

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
3. *Dietetic and Nutritional Services*																				
a. *Dietitians*					11	2				3		1								17
b. *Nutritionists*										3										3
4. *Emergency Health Services*																				
a. *Emergency/Ambulance Attendants*	52				52					2	2									108
5. *Environmental Health Services*																				
a. *Health Physicists*					2					4	1									7
b. *Industrial Hygienists*																				
c. *Environmental Scientists*											1									1
d. *Sanitarians*	7							1	4	6										18
e. *Public Health Engineers*										1										1
6. *Health Education*																				
a. *Public Health Educators*									.5	4	1									5.5
b. *School Health Educators*										17										17
c. *Health Science Educators*																				
7. *Health Planning*																				
a. *Patient Care Analysts*					.5															.5
b. *Health Care Planners*									1	4	3.5									8.5
c. *Bio-statisticians*																				
8. *Medical Librarians*					3	1	1													5

Legend: Refer to first page of this summary.

Employment Settings*

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
9. *Medical Records Services*																				
a. *Medical Record Librarians*					9.5		2		1		1									13.5
b. *Record Technicians*					21	1														22
c. *Record Clerks*	2				7		3					2								14
10. *Medical Technology*																				
a. *Medical Technologists*					46.5	5	1													52.5
b. *Medical Technicians*					16	2				1										19
c. *Certified Lab Technicians*					16		3													19
d. *Cytology/Tissue Technicians*					2															2
e. *Laboratory Assistants*					13		4													17
11. *Medicine and Osteopathy*																				
a. *Physicians*																				
Allergist	3																			3
Anesthesiologist	12					1														13
Aviation Medicine Spec.							2.5													2.5
Cardiovascular Dis. Spec.	7																			7
Colon-Rectal Surg. (Proc.)																				
Dermatologist	3																			3
Emergency Specialist																				
Endocrinologist																				
Gastroenterologist																				
General Practitioner	100					4	5		.5	.5	2									112
Gynecologist/Obstetrician	22						2.5													24.5
Internist	20					5	2.5													27.5
Manipulative Therapy Spec.																				
Neurological Surgeon	3.5					.5														4
Neurologist	1																			1
Occupational Med. Spec.																				
Opthalmologist	12																			12
Orthopedic Surgeon	16					1														17

Legend: Refer to first page of this summary.

Employment Settings*

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
a. *Physicians (continued)*																				
Otolaryngologist	5																			5
Pathologist	8				.5						.5									9
Pediatrician	16						1													17
Physiatrist																				
Plastic Surgeon	2																			2
Preventive Med. Spec.																				
Psychiatrist	3.5					.5														4
Public Health Physician	1							3	3	.5										7.5
Pulmonary Disease Spec.																				
Radiologist	12				.5		1													13.5
Surgeon	25					4	2			2										33
Thoracic Surgeon	2																			2
Urologist	7					4														11
Intern																				
Resident																				
b. *Osteopathic Physicians*	7																			7
12. *Nursing and Related Services*																				
a. *Registered Nurses*	136				685	42	19	4	14.5	21	12	109			17	24.5			28	1112
b. *Licensed Practical Nurses*	29				352	21	3	2	2	39	4	98							5	555
c. *Nurse Aides/Orderlies*					281	20	43			214	1	330								889
d. *Ward Clerks*					48	4				1	1									54
e. *Surgical Technicians*					87	3														90
13. *Pharmacy*																				
a. *Pharmacists*	180				14.5	2	1				1									198.5
b. *Pharmacy Aides*					14	1	1			2										18
c. *Pharmacy Interns*	11																			11

*Legend: Refer to first page of this summary.

Employment Settings*

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
14. *Chiropractors*	25																			25
15. *Radiologic Technology*																				
a. *Technologists*					23															23
b. *Technicians*					29	3.5	4		1.5											38
16. *Medical Secretarial/Office Personnel*					49	3	24		1	2	2	3								84
17. *Psycho-Social Health Services*																				
a. *Psychologists (MA & PhD)*	1								3	2.5										6.5
b. *Social Service Workers*					2	4			21	3						.5				30.5
c. *Vocational Rehabilitation Counseling*						2			11											13
18. *Therapists*																				
a. *Speech Pathology Therapists*	2				2.5					4						12				20.5
b. *Audiologists*					.5															.5
c. *Physical Therapists*					15	2	1		.5	1										19.5
d. *Occupational Therapists*					4	1														5
e. *Inhalation Therapists*					6.5															6.5
f. *Orthotists-Prosthetists*	2					1														3
g. *Manual Arts Therapists*																				
h. *Recreational Therapists*					5						1									6
19. *Veterinarians*	71						1													72

Legend: Refer to first page of this summary.

Employment Settings*

	1	2a	2b	2c	3a	3b	3c	4a	4b	4c	4d	5	6a	6b	7	8a	8b	8c	9	Total
20. Physician Support Personnel																				
a. Physician's Assistants	2																			2
b. Nurse Clinicians																				
c. Nurse Anesthetists					15															15
21. Other																				
a. Bio-Engineering																				
b. ECG Technicians																				
c. EEG Technicians																				
d. Optometrists	37																			37
e. Orthoptists																				
f. Podiatrists	7																			7

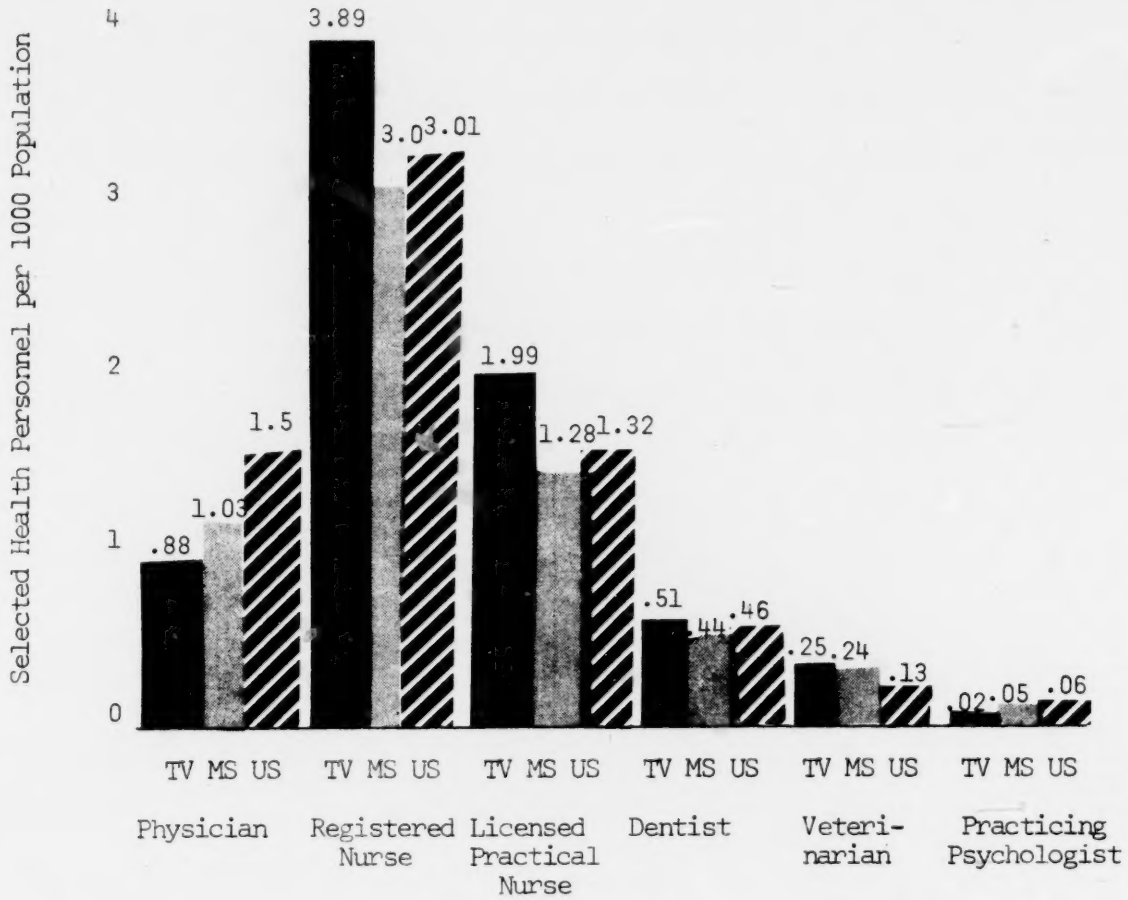
*Legend: Refer to first page of this summary.

D. HEALTH MANPOWER: SELECTED HEALTH PERSONNEL BY COUNTY

Area Surveyed Treasure Valley

County	*MD*	*RN*	*LPN*	*Dentist*	*Pharm.*	*Vet.*	*Psychol.*	*Med. Tech.*
Ada-Idaho	176	638	262	73	89	27	4	24
Adams	1	10	0	0	3	1	0	2
Boise	0	0	0	0	0	0	0	0
Canyon	78.5	211.5	182.5	24	39	20	2.5	15
Elmore	20.5	38	6	11	9	2	0	2
Gem	5	22	26.5	3	6	4	0	0
Owyhee	3.5	15	9	2	3	4	0	0
Payette	4	22	5	3	12	3	0	0
Valley	6	17.5	6	2	4	1	0	0.5
Washington	3	14	10.5	2	7	5	0	1
Baker-Oregon	11.5	44	3	12	10	2	0	1
Harney	6	28.5	2.5	3	2	0	0	1
Malheur	17	52	42	9.5	15	3	0	6

FIGURE 5: Selected Health Personnel



TV = Treasure Valley
MS = Mountain States
US = United States

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[1] All Mountain States and U.S. data from: USDHEW. Health Resources Statistics: 1971 Edition. Publication No. (HSM) 72-1509. U.S. Government Printing Office, Washington, D.C., 1972.

SECTION III: EDUCATION OF HEALTH MANPOWER

A. INTRODUCTION

This section is divided into three sets of information concerning the educational facilities which train persons to work in the health professions. The first portion of this section is a listing of the various institutions, and programs within those institutions, which provide original training for the health professions in Treasure Valley. This listing includes the time required for certification for a given program as well as the number of persons who have been enrolled and who have graduated in the last three years, where such information was available. A blank space in the "enrollee-graduate" section indicates that this information was not available at the time of this publication or that the program was not operative at that time.

The second portion lists all the other institutions, and programs within those institutions which train health professionals in the State of Idaho outside of Treasure Valley. Here only a simple listing of such programs is given without the inclusion of training time or enrollee-graduate information.

The third portion of this section is an itemization of "health facility libraries" including the number of books and periodicals in those libraries in the Treasure Valley area; and the location and type of video-tape equipment on hand in health facilities in the Treasure Valley area.

The research team has not provided comparison data here for the relative ratios of graduates in the health professions for two major

reasons. First, the location of training institutions would provide an obviously higher concentration of graduates to population than would be expected over a normal distribution including areas which do not have training programs for health professionals. Secondly, the number of graduates in a given health training program seems not to be an accurate indicator of the availability of these newly trained health workers for that area; e.g., the fact that Boise State College produced 61 graduates in their nursing program in 1972 does not necessarily mean that there are 61 newly trained nurses available to work in the Boise area this year. Some of these persons will obviously seek work elsewhere; others will not be employed, etc. Consequently, we felt that such comparison data to Regional or National ratios would be more misleading than helpful.

B. EDUCATION OF HEALTH MANPOWER: ORIGINAL EDUCATION PROGRAMS

Area Surveyed Treasure Valley

Institutions Certifying Health Personnel

1. Hospitals

A. St. Alphonsus
(Name)

1) Medical Technologist — 1 Year
(Type of Program) — *(Time for Certification)*

Selected persons with baccalaureate degrees in the sciences are admitted for one year of clinical training. The hospital grants a certificate of completion

2) Nurse Anesthetist — 2 Years
(Type of Program) — *(Time for Certification)*

	1970	*1971*	*1972*
a. Enrollees	1	1	0
b. Graduates	1	1	0

3) Radiologic Technology — 2 Years
(Type of Program) — *(Time for Certification)*

	1970	*1971*	*1972*
a. Enrollees	6	5	5
b. Graduates	5	5	5

B. St. Lukes Hospital
(Name)

1) Nurse Anesthetist — 1 1/2 Years
(Type of Program) — *(Time for Certification)*

	1970	*1971*	*1972*
a. Enrollees	6	8	11
b. Graduates	3	3	3

2) Radiologic Technology — 26 Months
(Type of Program) — *(Time for Certification)*

	1970	*1971*	*1972*
a. Enrollees	6	6	4
b. Graduates	6	6	3

3) Radiation Therapy — 1 Year
(Type of Program) — *(Time for Certification)*

	1970	*1971*	*1972*
a. Enrollees	3	1	2
b. Graduates	3	1	2

4) Medical Technologist — 1 Year
(Type of Program) — *(Time for Certification)*

Selected persons with baccalaureate degrees in the sciences are admitted for one year of clinical training. The hospital grants a certificate of completion.

C. Caldwell Memorial Hospital
(Name)

1) Nurse Anesthetist — 2 Years
(Type of Program) — *(Time for Certification)*

Currently no enrollees; program is available.

2) X-ray Technician — 2 Years
(Type of Program) — *(Time for Certification)*

	1970	*1971*	*1972*
a. Enrollees	0	0	4
b. Graduates	0	0	0

2. Colleges

A. Boise State College
(Name)

1) Environmental Health — 4 Years
(Type of Program) — *(Time for Certification)*

	1970	*1971*	*1972*
a. Enrollees	___	___	___
b. Graduates	___	___	___

2) Medical Secretary — 2 Years
(Type of Program) — (Time for Certification)

	1970	1971	1972
a. Enrollees	___	___	___
b. Graduates	___	3	2

3) Medical Technologist — 4 Years
(Type of Program) — (Time for Certification)

	1970	1971	1972
a. Enrollees	___	___	___
b. Graduates	7	0	8

4) Registered Nurse — 2 Years
(Type of Program) — (Time for Certification)

	1970	1971	1972
a. Enrollees	___	___	___
b. Graduates	34	54	60

5) Medical Records Technician — 2 Years
(Type of Program) — (Time for Certification)

	1970	1971	1972
a. Enrollees	___	___	___
b. Graduates	2	3	6

6) Inhalation Therapist — 2 Years
(Type of Program) — (Time for Certification)

	1970	1971	1972
a. Enrollees	___	___	___
b. Graduates	___	___	6

B. College of Idaho
(Name)

1) Medical Technology — 4 Years
(Type of Program) — (Time for Certification)

	1970	1971	1972
a. Enrollees	___	___	___
b. Graduates	___	___	___

C. Northwest Nazarene College
(Name)

1) Institutional Food — 2 Years
(Type of Program) — *(Time for Certification)*

Program available for the first time in September 1972.

2) Medical Technology — 4 Years
(Type of Program) — *(Time for Certification)*

	1970	*1971*	*1972*
a. *Enrollees*	____	____	____
b. *Graduates*	____	____	____

D. Treasure Valley Community College
(Name)

1) Licensed Practical Nurse — 1 Year
(Type of Program) — *(Time for Certification)*

	1970	*1971*	*1972*
a. *Enrollees*	____	____	____
b. *Graduates*	____	____	____

3. *Vocational Technical Programs*

1) Licensed Practical Nurse — 1 Year
(Type of Program) — *(Time for Certification)*

	1970	*1971*	*1972*
a. *Enrollees*	10	11	15
b. *Graduates*	10	11	15

(Training at Caldwell Memorial Hospital)

2) Licensed Practical Nurse — 1 Year
(Type of Program) — *(Time for Certification)*

	1970	*1971*	*1972*
a. *Enrollees*	24	13	12
b. *Graduates*	24	13	12

(Training at Nampa Mercy Hospital)

3) Licensed Practical Nurse — 1 Year
(Type of Program) — (Time for Certification)

	1970	1971	1972
a. Enrollees	____	____	____
b. Graduates	____	____	____

4) Medical Secretary — 7 Months
(Type of Program) — (Time for Certification)

	1970	1971	1972
a. Enrollees	15	15	15
b. Graduates	15	15	15

(Training at Caldwell Memorial Hospital)

5) Respiratory Therapy Technician — 10 Months
(Type of Program) — (Time for Certification)

	1970	1971	1972
a. Enrollees	____	10	10
b. Graduates	____	10	10

(Training at Caldwell Memorial Hospital)

6) Dental Assistant — 1 Year
(Type of Program) — (Time for Certification)

	1970	1971	1972
a. Enrollees	20	21	20
b. Graduates	9	16	13

7) Operating Room Technician — 1 Year
(Type of Program) — (Time for Certification)

	1970	1971	1972
a. Enrollees	____	____	6
b. Graduates	____	____	6

C. HEALTH EDUCATION PROGRAMS: ORIGINAL EDUCATION OUTSIDE AREA AND IN-STATE

Area Surveyed Idaho

Original Education Centers (Name and Location)	Personnel Categories Trained
Bannock Memorial Hospital Pocatello, Idaho	Radiologic Technology Medical Technologist
Bingham County School District #55 Blackfoot, Idaho	Practical Nursing
Blaine County Hospital Hailey, Idaho	Nurses Aide
Bonner County School District #82 Sandpoint, Idaho	Practical Nursing
Bonneville County School District #91 Idaho Falls, Idaho	Practical Nursing
Cassia County School District #151 Burley, Idaho	Practical Nursing
Caribou County Hospital Soda Springs, Idaho	Nurse Aide

HEALTH EDUCATION PROGRAMS: Original Education Outside Area and In-State (Contd)

Original Education Centers (Name and Location)	Personnel Categories Trained
College of Southern Idaho Twin Falls, Idaho	Dental Receptionist Medical Receptionist Medical Secretary Practical Nursing Registered Nurse
Eastern Idaho Vocational School Idaho Falls, Idaho	LPN
Gooding County Memorial Hospital Gooding, Idaho	Nurses Aide
Idaho State University Pocatello, Idaho	Central Service Technology Dental Hygiene Home Health Aide Medical Stenographer Medical Technology Medical Terminology Micro-Biology Nutrition, Dietetics and Institutional Management Operating Room Assistant Pharmacy Practical Nursing Professional Nursing Refresher Course for Inactive Registered Nurses Speech Pathology and Audiology
Jerome County School District #261 Jerome, Idaho	Practical Nursing

HEALTH EDUCATION PROGRAMS: Original Education Outside Area and In-State (Contd)

Original Education Centers (Name and Location)	Personnel Categories Trained
Latah County School District #281 Moscow, Idaho	Practical Nursing
Lewis-Clark Norman Lewiston, Idaho	Practical Nursing Professional Nursing
LDS Hospital Idaho Falls, Idaho	Medical Technology
Magic Valley Memorial Twin Falls, Idaho	Medical Technology
North Idaho Junior College Coeur d'Alene, Idaho	Medical Secretary Practical Nursing Pre-Physical and Occupational Therapy Pre-Veterinarian Registered Nurse Medical Engineering Medical Social Worker Aide
Ricks College Rexburg, Idaho	Professional Nursing
Sacred Heart Hospital Idaho Falls, Idaho	Medical Technology Radiologic Technology
St. Anthony Community Hospital Pocatello, Idaho	Licensed Practical Nurse Radiologic Technology

HEALTH EDUCATION PROGRAMS: Original Education Outside Area and In-State (Contd)

Original Education Centers (Name and Location)	Personnel Categories Trained
St. Benedict's Hospital Jerome, Idaho	Nurses Aide
University of Idaho Moscow, Idaho	Bacteriology Bio-Chemistry Dietetics and Institutional Management Food and Nutrition Food and Nutrition Research Medical Technology Medical Engineering Medical Social Worker

D. HEALTH EDUCATION RESOURCES

Area Surveyed TREASURE VALLEY

1. Health Facility Libraries (List) Names and Addresses	Number of Books	Number of Periodicals
Caldwell Memorial Hospital Gerald Miller Library Caldwell, Idaho	400	52
Harney County Health Office Burns, Oregon	40	5
Holy Rosary Hospital Medical Record Dept. St. Ontario, Oregon	595	25
Idaho State School and Hospital Medical Library Pocatello, Idaho	309	10
Malheur Memorial Hospital Nyssa, Oregon	150	20
St. Alphonsus Hospital Health Science Library Boise, Idaho	500	105 regular 10 donated
St. Elizabeth Community 3325 Normandie Baker, Oregon	75	10
St. Lukes Hospital 130 E. Bannock Boise, Idaho	477	59
USAF Hospital Mountain Home, AFB, Idaho	614	40
V.A. Hospital Library 5th Fort Boise Boise, Idaho	878	999 Bound 97 Current
Walter Knox Memorial Hospital 1202 E. Locust Dr. Emmett, Idaho	109	17

HEALTH EDUCATION RESOURCES (Contd.)

Area Surveyed TREASURE VALLEY

2. Video-Tape Capability

Locations	Brand	Quantity	Size
Caldwell Memorial Hospital	Ampex-Canon	1	1 in. (recorder)
		1	Monitor
		1	Camera
Elk's Rehabilitation Center	Ampex	1	1 in. (recorder)
			1 Camera
			1 Monitor
Harney County Health Office	Concord	2	1/2" (recorders)
		2	Cameras
		2	Monitors
Idaho State School & Hospital	Sony	1	1" (recorder)
		1	Monitor
		1	Camera
St. Alphonsus Hospital	Panasonic	1	Recorder
		1	Camera
		20	Monitors
Veterans Administration Hospital	Ampex	1	1 in. (recorder)
		2	Cassettes

SECTION IV: HEALTH FACILITIES

A. INTRODUCTION

This fourth and final section contains a listing of the numbers of hospitals, nursing homes, medical clinics, dental facilities, clinical laboratories, mental health centers, pharmacies, and ambulances. Simply, this listing is intended to give a statistical picture of structural direct-care capability of the area without regard to the health professionals required to man these facilities.

The research team has provided graphic comparisons for the ratio of hospital beds, nursing home beds, pharmacists, and ambulances per thousand population to the Mountain States Region and to the United States in order to give the reader a basis for judging the relative concentration of these facilities in this particular area.

B. NARRATIVE SUMMARY

The data indicates that the Treasure Valley area has a somewhat lower ratio of hospital beds per thousand population than either the Region or the Nation. The ratio of nursing home beds is somewhat higher in Treasure Valley, however. (see Figure 6)

The ratios of pharmacists and of ambulances to one-thousand population is not substantially different from Treasure Valley to the comparison areas. (see Figure 7)

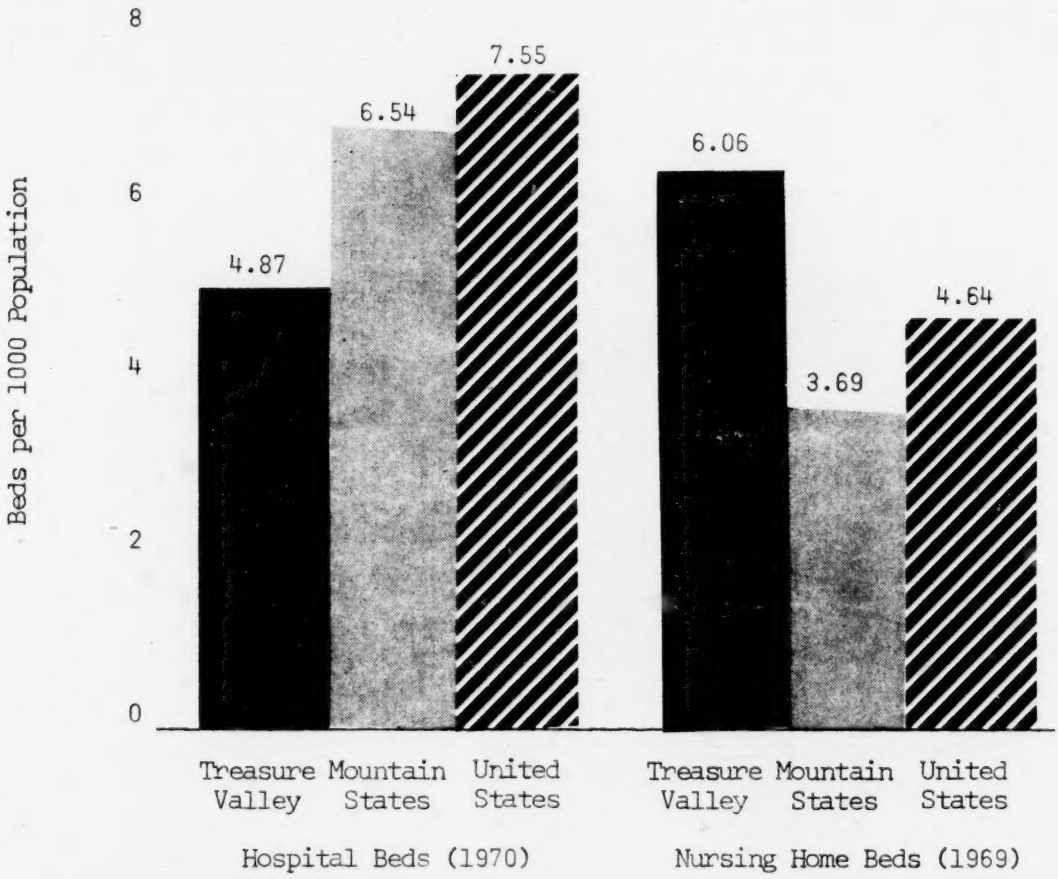
C. HEALTH FACILITIES: DATA SUMMARY

Area Surveyed Treasure Valley

INSTITUTIONS

1. Hospitals	18
a. Number Beds	1,366
2. Nursing Homes	22
b. Number Beds	1,698
3. Medical (Clinics)	28
4. Dental Facilities	10
5. Clinical Laboratories	21
6. Mental Health Centers	2
7. Pharmacies	81
8. Ambulances	36

FIGURE 6: Hospital and Nursing Home Beds



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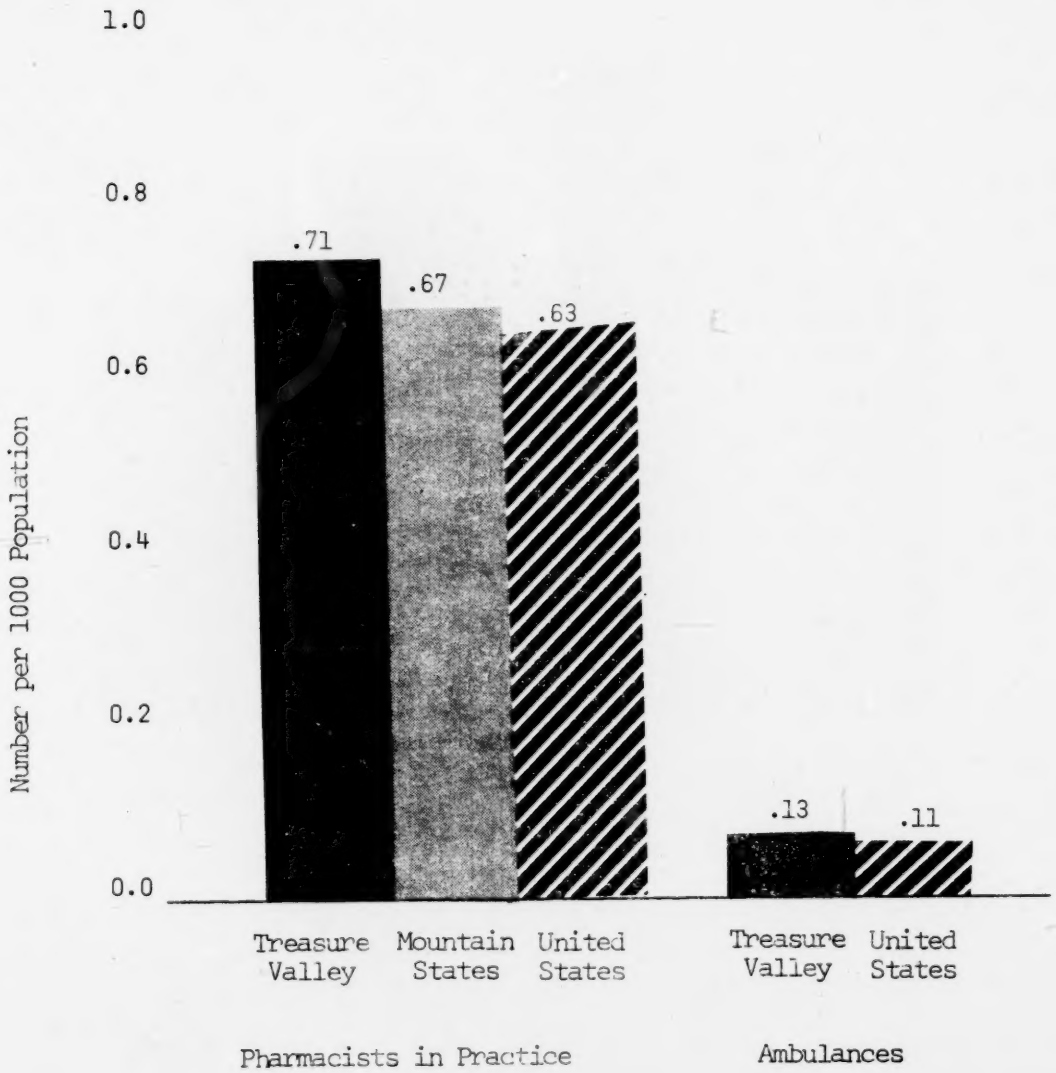
[1] All Mountain States and U.S. Data from: USDHEW. Health Resources Statistics: 1971 Edition. Publication No. (HSM) 72-1509. U.S. Government Printing Office, Washington, D.C., 1972.

FIGURE 7: Pharmacists -- Ambulances



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1 All Mountain States and U.S. data from:
USDHEW. Health Resources Statistics: 1971 Edition. Publication No. (HSM) 72-1509. U.S. Government Printing Office, Washington, D.C., 1972.

APPENDIX I

MS/RMP WORKING DEFINITIONS OF HEALTH OCCUPATIONS

1. Administration
   a. Hospital Administrators and Assistant Administrators
      Administer and coordinate activities of hospital personnel to promote care of sick and injured, furtherance of scientific knowledge, development of preventive medicine, advancement of medical and vocational rehabilitation, and participation in and promotion of community health and welfare.
   b. Nursing Home Administrators and Assistant Administrators
      Same as above, except in nursing homes.
2. Dentistry
   a. Dentists
      1) Endodontists
         Concerned with the etiology, prevention, diagnosis and treatment of diseases and injuries that affect the tooth pulp and apical periodontal tissues.
      2) Oral Pathologists
         Examine and diagnose tumors and lesions of mouth.
      3) Oral Surgeons
         Perform surgery on mouth and jaws.
      4) Orthodontists
         Prevent, diagnose, and correct deviations from normal that occur in growth, development, and position of teeth and other dental-facial structures.
      5) Pedodontists
         Treat children's teeth.
      6) Periodontists
         Treat inflammatory and destructive diseases of investing and supporting tissue of teeth.
      7) Prosthodontists
         Restore and maintain oral functions.
      8) Public Health Dentists
         Participate in planning, organizing, and maintaining dental health program of public health agency.
      9) General Dentistry
         Diagnose and treat diseases, injuries, and malformations of teeth and gums, and related oral structures.
   b. Dental Hygienists
      Perform dental prophylactic treatments and instruct groups and individuals in care of teeth and mouth.
   c. Dental Laboratory Technicians
      Make dentures, partials, etc., as needed by the dentist.
3. Dietetic and Nutritional Services
   a. Dietitians
      Plan and direct food service programs in hospitals, schools, restraunts, and other public or private institutions.

b. Nutritionists
Organize, plan and conduct programs concerning nutrition to assist in promotion of health and control of disease.

4. Emergency Health Services
   a. Emergency/Ambulance Attendants
   Assist persons entering hospital through emergency entrances; and accompany and assist ambulance driver in transporting sick, injured, or convalescent persons.
5. Environmental Health Services
   a. Health Physicists
   Devise and direct research, training, and monitoring programs to protect plant and laboratory personnel from radiation hazards.
   b. Industrial Hygienists
   Conduct health program in industrial plant or similar organization to eliminate or control occupational health hazards and diseases.
   c. Environmental Scientists
   Perform research related to specific man-made or natural environmental hazards to health.
   d. Sanitarians
   Work with general environmental problems related to the control of food and drink, private water supplies and sewage disposal, and control of insects and rodents.
   e. Public Health Engineers
   Design, construct and maintain large engineering systems or programs and know how public health is affected by these systems.
6. Health Education
   a. Public Health Educators
   Plan, organize and direct health education programs for group and community needs.
   b. School Health Educators
   Plan, organize and direct health education programs in schools.
   c. Health Science Educators
   Provide health care and health prevention instruction through community, county, or state organizations.
7. Health Planning
   a. Patient Care Analysts
   Engage in analyzing the comprehensive care of in-patients in an institution, usually a hospital.
   b. Health Care Planners
   Analyze health needs and services, propose improvements and assist in the implementation of health care programs.
   c. Bio-statisticians
   Plan surveys, and collect, organize, interpret, summarize, and analyze numerical data on sampling or complete enumeration bases, applying statistical theory and methods to provide usable information in scientific and other fields.
8. Medical Librarians
   Manage library or section containing specialized materials for hospitals.
9. Medical Records Services
   a. Medical Record Librarians
   Compile and maintain medical records of hospital and clinic patients.

b. Record Technicians
Engaged in the formulation of and handling of medical data recording procedures.
c. Record Clerks
Classify medical records of hospital patients and compile statistics for use in reports and surveys.

10. Medical Technology
a. Medical Technologists (usually a 4 year degree)
Perform chemical, microscopic, and bacteriologic tests to provide data for use in treatment and diagnosis of disease.
b. Medical Technicians (usually a 2 year degree)
Perform routine tests in medical laboratory for use in treatment and diagnosis of disease.
c. Certified Laboratory Technicians (usually train in 1 year or less)
Same as b.
d. Cytology/Tissue Technicians
Perform laboratory analysis on cell and tissue samples.
e. Laboratory Assistance to the above personnel in laboratory responsibilities.

11. Medicine and Osteopathy
a. Physicians
1) Allergists
Specialize in the diagnosis and treatment of allergic conditions.
2) Anesthesiologists
Administer anesthetics to render patients insensible to pain during surgical, obstetrical and other medical procedures.
3) Aviation Medicine Specialists
Administer general medicine to flight personnel only.
4) Cardiovascular Disease Specialists
Specialize in the diagnosis and treatment of diseases of the heart and blood vessels.
5) Colon and Rectal Surgeons (Proctologists)
Specialize in the treatment of the rectum and its diseases.
6) Dermatologists
Diagnose and treat diseases of the human skin.
7) Emergency Specialists
Physicians who work in hospital emergency rooms and handle emergency type cases.
8) Endocrinologists
Skilled in the diagnosis and treatment of disorders of the glands of internal secretion.
9) Gastroenterologists
Specialize in diseases of the stomach and intestine.
10) General Practitioners
Attend to a variety of medical cases in general practice.
11) Gynecologists/Obstetricians
Treat and diagnose diseases of the female generative organs; treat women during prenatal, natal, and postnatal periods.
12) Internists
Specialize in the diagnosis and medical treatment of diseases and disorders of the internal structures of the human body.

13) Manipulative Therapy Specialists
Specialize in prescription and supervision of therapeutic administrations.

14) Neurological Surgeons
Specialize in surgery of the nervous system.

15) Neurologists
Diagnose and treat organic diseases and disorders of the nervous system.

16) Occupational Medicine Specialists
Specialize in diagnosis and care of individuals in specific occupations and settings.

17) Opthalmologists
Diagnose and treat diseases and injuries of the eyes.

18) Orthopedic Surgeons
Preserve, restore, and develop form and function of the extremities, spine, and associated structures by medical, surgical, and physical methods.

19) Otolaryngologists
Diagnose and treat diseases of the ear, nose and throat.

20) Pathologists
Study nature, cause, and development of diseases, and structural and functional changes caused by them.

21) Pediatricians
Plan and carry out medical care program for children from birth through adolescence to aid in mental and physical growth and development.

22) Physiatrists
Specialize in clinical and diagnostic use of physical agents and exercises to provide physiotherapy for physical, mental and occupational rehabilitation of patients.

23) Plastic Surgeons
Specialize in skin grafts and bone and tissue transplants to restore or repair damaged, lost or deformed parts of the face and body.

24) Preventive Medicine Specialists
Specialize in prescribing practices which prevent physical subsumption and deterioration.

25) Psychiatrists
Study, diagnose and treat diseases and disorders of the mind.

26) Public Health Physicians
Generalists or specialists employed by the community, county, or state.

27) Pulmonary Disease Specialists
Specialize in treating diseases of the lung.

28) Radiologists
Diagnose and treat diseases of the human body, using X-rays and radio-active substances.

29) Surgeons
Perform surgery to correct deformities, repair injuries, prevent diseases, and improve function in patients.

30) Thoracic Surgeons
Perform surgery on the chest.

31) Urologists
Diagnose and treat diseases and disorders of the genito-urinary organs and tract.

32) Interns
Perform medical duties while serving in hospital for specified length of time to gain practical experience immediately following graduation from medical school, as requirement for license to practice medicine.

33) Residents
Graduate and licensed physicians resident in a hospital.

b. Osteopathic Physicians

12. Nursing and Related Services

a. Registered Nurses
A term applied to persons meeting the educational, legal, and training requirements to practice as professional nurses, as required by a State board of nursing.

b. Licensed Practical Nurses
Care for ill, injured, convalescent, and handicapped persons in hospitals, clinics, private homes, sanitariums, and similar institutions.

c. Nurse Aides/Orderlies/Attendants
Assist in care of hospital patients, under direction of nursing and medical staff.

d. Ward Clerks
Prepare and compile records in hospital nursing unit, such as obstetrics, pediatrics or surgery.

e. Surgical Technicians
Health personnel trained specifically to work in an operating room.

13. Pharmacy

a. Pharmacists
Compound and dispense medications, following prescriptions issued by physicians, dentists or other authorized medical practitioners.

b. Pharmacy Aides
Mix pharmaceutical preparations, under direction of pharmacist, issue medicine, label and store supplies, and clean equipment and work areas in hospital pharmacy.

c. Pharmacy Interns
Pharmacy students who work under the supervision of a registered pharmacist.

14. Chiropractors
Adjust spinal column and other articulations of body to prevent disease and correct abnormalities of human body believed to be caused by interference with the nervous system.

15. Radiologic Technology

a. Technologists (usually a 4 year degree)
Apply roentgen rays and radioactive substances to patients for diagnostic and therapeutic purposes.

b. Technicians (less than a 4 year degree)
Same as a.

16. Medical Secretarial/Office Personnel
Prepare medical charts and reports for doctor or hospital personnel, utilizing knowledge of medical terminology. May prepare and send bills to patients and record appointments and perform general secretarial and clerical services in a medical setting.

17. Psycho-Social Health Services
    a. Psychologists (M.A. or Ph.D.)
    Diagnose mental and emotional disorders of individuals and administer programs of treatment.
    b. Social Service Workers
    Counsel or otherwise assist persons for improved social adaptation, e.g., Social Workers, etc.
    c. Vocational Rehabilitation Counseling
    Persons engaged in counseling individuals and providing group educational and vocational guidance services.

18. Therapists
    a. Speech Pathology Therapists
    Examine and provide remedial services for patients with speech and language disorders.
    b. Audiologists
    Specialize in diagnostic evaluation, habilitative and rehabilitative services, and research related to hearing.
    c. Physical Therapists
    Treat patients with disabilities, disorders, and injuries to relieve pain, develop or restore function, and maintain maximum performance, using physical means such as exercise, massage, heat, water, light, and electricity as prescribed by physician.
    d. Occupational Therapists
    Plan, organize, and participate in medically oriented occupational program in hospital or similar institution to rehabilitate patients who are physically or mentally ill.
    e. Inhalation Therapists
    Set up and operate various types of oxygen equipment, such as iron lungs, oxygen tents, resuscitators and incubators to administer oxygen and other gases to patients.
    f. Orthotists-Prosthetists
    Write specifications for and fit artificial limbs, braces, and appliances for body deformities and disorders following prescription of physician or other qualified medical practitioner.
    g. Manual Arts Therapists
    Instruct patients in prescribed manual arts activities to prevent anatomical and phsiological deconditioning, and to assist in maintaining, improving, or developing work skills.
    h. Recreational Therapists
    Plan, organize and direct medically approved recreation program for patients in hospitals and other institutions.

19. Veterinarians
Diagnose and treat diseases and disorders of animals.

20. Physician Support Personnel
    a. Physician's Assistants
       Assist physician by performing diagnostic and therapeutic procedures under the general supervision and responsibility of the physician. Special academic-professional training of one to two years in classroom and clinical work.
    b. Nurse Clinicians
       Registered nurses who assist a physician by performing diagnostic and therapeutic procedures under the general supervision and responsibility of the physician.
    c. Nurse Anesthetists
       Registered nurses trained and qualified to administer anesthetics.
21. Other
    a. Bio-Engineering
       Practice of design and innovation of mechanical/electrical devices for biological functioning.
    b. ECG Technicians
       Personnel trained to operate an electrocardiograph.
    c. EEG Technicians
       Personnel trained to operate an electroencephalograph.
    d. Optometrists
       Examine eyes to determine visual efficiency and performancy by means of instrumentation and observation, and prescribe corrective procedures.
    e. Ortoptists
       Teach persons with correctable focusing defects to develop and use binocular vision (focusing of both eyes).
    f. Podiatrists
       Diagnose and treat structural problems relating to the foot.

APPENDIX 2

PRIMARY DATA SOURCES

Area Surveyed Treasure Valley

SOURCE	DATA TYPE
American Red Cross Boise, Idaho	Personnel and educational resources for the listed institution
Child Development Center Boise, Idaho	Same
Child Health Clinic	Same
City-County Health Department	Same
Community Health Clinic	Same
Convalescent Center AHEC and MSRMP Health Manpower Survey	Same
County Welfare Agency Boise, Idaho and Caldwell, Idaho	Same
Easter Seal Society for Crippled Children and Adults, Inc.	Same

PRIMARY DATA SOURCES (Contd)

SOURCE	DATA TYPE
Elk's Rehabilitation Center	Personnel and educational resources for the listed institution
Family Planning Clinic	Same
Idaho State Department of Health	Same
Idaho State Department of Health, Mental Health Division	Same
Mountain States Tumor Institute	Same
School District, Nurses	Same
State of Oregon Department of Health, Division of Mental Health	Same
Tri-County Counseling Center, Weiser, Idaho	Same
Vocational Rehabilitation Center	Same
Community Institute for Human Resources	Membership Rosters and Health Manpower Quantities
Eastern Oregon Dental Society, Information through Portland extension	Same

PRIMARY DATA SOURCES (Contd)

SOURCE	DATA TYPE
Idaho Dental Assistants Association	Same
Idaho Hospital Association	Membership Rosters and Health Manpower Quantities
Idaho Psychiatric Association	Same
Idaho Psychological Association	Same
Idaho State Board of Dentistry	Same
Idaho State Board of Pharmacy	Same
Idaho State Bureau of Vital Statistics	Same
Model Cities	Same
Nurses Association	Same
Nurses Registry	Same
State Department of Employment	Same
State Board of Nursing Homes	Same
State of Oregon Board of Pharmacy	Same
State of Oregon Department of Health, Bureau of Licensing	Same

APPENDIX 3

SECONDARY DATA SOURCES

Area Surveyed Treasure Valley

SOURCE	DATA TYPE
Annual Report of the Idaho State Board of Nursing, July 1, 1970-June 30, 1971	
Annual Report of the Oregon State Board of Nursing, July 1, 1970-June 30, 1971	
Comprehensive Health Planning Ecology Data Book	Idaho State Comprehensive Health Planning Agency Staff, Boise, Idaho, April, 1969
Health Career Guidebook for Idaho Counselors and Students	Idaho Health Careers Recruitment Council, Boise, Idaho, February, 1972
Idaho Health Profile	Idaho Division of the Mountain States Regional Medical Program, Boise, Idaho, July, 1969
Idaho Hospital Heads of Departments	A Directory, 1971-1972, Idaho Hospital Association, Boise, Idaho, 1971
Membership Roster 1970-1971	Oregon Medical Association, 1970 (Portland)
Telephone Books	All areas
Treasure Valley Community Resources Director	Idaho Information and Referral Service, February, 1972
Update: A study of Nursing Needs and Resources	Mountain States Regional Medical Program, Boise, Idaho, June, 1972
Hospitals, Guide Issue, Part 2	American Health Assoc., Chicago

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